AMENDMENTS TO THE CLAIMS

1. (Currently amended) An input level translator circuit comprising:

a first pass circuit that is coupled to a full-range node, to a first bias node, and to a high-range node;

a second pass circuit that is coupled to the full-range node, to a second bias node, and to a low-range node;

a first shunt circuit that is coupled between the first bias node and the high-range node; and

a second shunt circuit that is coupled between the second bias node and the low-range node, wherein the second shunt circuit is arranged to short the low-range node to the second bias node ~~includes a switch circuit that is arranged to close~~ if a voltage associated with the full-range node corresponds to a logic high.

2. (Previously Presented) An input level translator circuit comprising:

a first pass circuit that is coupled to a full-range node, to a first bias node, and to a high-range node;

a second pass circuit that is coupled to the full-range node, to a second bias node, and to a low-range node;

a first shunt circuit that is coupled between the first bias node and the high-range node; and

a second shunt circuit that is coupled between the second bias node and the low-range node, wherein

the first bias node and the second bias node have approximately the same voltage.

3. (Original) The input level translator circuit of claim 1, wherein

the first shunt circuit is configured to receive a first cascode bias voltage at the first bias node, wherein

the first cascode bias voltage is appropriate for biasing a cascode transistor.

4. (Original) The input level translator circuit of claim 1, wherein

the first pass circuit is configured to provide a high-range signal at the high-range node in response to a full-range signal,

the second pass circuit is configured to provide a low-range signal at the low-range node in response to the full-range signal,

the full-range signal has a range from a low-voltage level to a high-voltage level,

the low-range signal has a range from the low-voltage level to an intermediate-voltage level,

the high-range signal has a range from the intermediate-voltage level to the high-voltage level, and

the intermediate voltage level is partway between the low-voltage level and the high-voltage level.

5. (Original) The input level translator circuit of claim 1, wherein:

the first bias node is coupled to a gate of a p-type transistor configured to operate as a cascode transistor, and

the second bias node is coupled to a gate of an n-type transistor configured to operate as another cascode transistor.

6. (Previously Presented) An input level translator circuit comprising:

a first pass circuit that is coupled to a full-range node, to a first bias node, and to a high-range node;

a second pass circuit that is coupled to the full-range node, to a second bias node, and to a low-range node;

a first shunt circuit that is coupled between the first bias node and the high-range node; and

a second shunt circuit that is coupled between the second bias node and the low-range node, wherein

the first shunt circuit comprises a transistor that has:

a gate that is coupled to the full-range node,

a source that is coupled to the high-range node, and

a drain that is coupled to the first bias node.

7. (Original) The input level translator circuit of claim 6, wherein

the second shunt circuit comprises a transistor that has:

a gate that is coupled to the full-range node,

a source that is coupled to the low-range node, and

a drain that is coupled to the second bias node.

8. (Currently amended) An input level translator circuit comprising:

a first pass circuit that is coupled to a full-range node, to a first bias node, and to a high-range node;

a second pass circuit that is coupled to the full-range node, to a second bias node, and to a low-range node;

a first shunt circuit that is coupled between the first bias node and the high-range node; and

a second shunt circuit that is coupled between the second bias node and the low-range node, wherein the second shunt circuit is arranged to short the low-range node to the second bias node if a voltage associated with the full-range node corresponds to a logic high, and ~~The input level translator circuit of claim 1,~~ wherein

the first shunt circuit is configured to influence a resistance between the first bias node and the high-range node depending on a full-range signal.

9. (Currently amended) An input level translator circuit comprising:

a first pass circuit that is coupled to a full-range node, to a first bias node, and to a high-range node;

a second pass circuit that is coupled to the full-range node, to a second bias node, and to a low-range node; and

a first shunt circuit that is coupled between the first bias node and the high-range node~~; and~~

~~a second shunt circuit that is coupled between the second bias node and the low-range node~~, wherein

the first shunt circuit is configured to isolate the first bias node from the high-range node if the full-range signal corresponds to a logic high, and to short the bias node to the high-range node if the full-range signal corresponds to a logic low.

10. (Previously Presented) An input level translator circuit comprising:

a first pass circuit that is coupled to a full-range node, to a first bias node, and to a high-range node;

a second pass circuit that is coupled to the full-range node, to a second bias node, and to a low-range node;

a first shunt circuit that is coupled between the first bias node and the high-range node; and

a second shunt circuit that is coupled between the second bias node and the low-range node, wherein

the first shunt circuit is configured to short the first bias node to the high-range node if the full-range signal corresponds to a logic low.

11. (Currently amended) An input level translator circuit comprising:

a first pass circuit that is coupled to a full-range node, to a first bias node, and to a high-range node;

a second pass circuit that is coupled to the full-range node, to a second bias node, and to a low-range node;

a first shunt circuit that is coupled between the first bias node and the high-range node; and

a second shunt circuit that is coupled between the second bias node and the low-range node, wherein the second shunt circuit is arranged to short the low-range node to the second bias node if a voltage associated with the full-range node corresponds to a logic high, and ~~The input level translator circuit of claim 1,~~ wherein

the second shunt circuit is configured to influence a resistance between the second bias node and the low-range node depending on a full-range signal.

12. (Original) The input level translator circuit of Claim 1, wherein

the first shunt circuit is configured to:

short the high-range node to the first bias node when a full-range signal corresponds to a first logic level, and

isolate the high-range node from the first bias node when the full-range signal corresponds to a second logic level, and

the second shunt circuit is configured to:

short the low-range node to the second bias node when a full-range signal corresponds to the second logic level, and

isolate the low-range node from the second bias node when the full-range signal corresponds to the second logic level.

13. (Currently amended) A method for translating a level for a full-range signal, comprising:

converting the full-range signal into a high-range signal at a high-range node;

converting the full-range signal into a low-range signal at a low-range node; and

ensuring that at least one of: the low-range node is driven during a full cycle of the full-range signal, or ~~and~~ the high-range node is driven during the full cycle of the full-range signal.

14. (Original) The method of Claim 13, wherein

the full-range signal has a range from a low-voltage level to a high-voltage level,

the low-range signal has a range from the low-voltage level to an intermediate-voltage level,

the high-range signal has a range from the intermediate-voltage level to the high-voltage level, and

the intermediate voltage level is partway between the low-voltage level and the high-voltage level.

15. (Original) The method of Claim 13, wherein

ensuring that the high range node is driven comprises influencing a resistance between a first bias node and the high-range node depending on the full–range signal; and

ensuring that the low range node is driven comprises influencing a resistance between a second bias node and the low-range node depending on the full-range signal.

16. (Original) The method of Claim 13, wherein

ensuring that the high-range node is driven comprises shorting the high-range node to the first bias node if the full-range signal corresponds to a first logic level; and

ensuring that the low-range node is driven comprises shorting the low-range node to the second bias node if the full-range voltage corresponds to the second logic level.

17. (Currently amended) The ~~An~~ input level translator circuit of Claim 10, wherein ~~comprising:~~

the ~~a~~ first pass circuit ~~that~~ is configured to provide a high-range signal at the ~~a~~ high-range node in response to a full-range signal;

the ~~a~~ second pass circuit ~~that~~ is configured to provide a low-range signal at the ~~a~~ low-range node in response to the full-range signal;

~~a first shunt circuit that is coupled between a first bias node and the high-range node, wherein~~ the first shunt circuit is configured to receive a p-type cascode bias signal at the first bias node~~, wherein the first shunt circuit includes a switch circuit that is arranged to close if a voltage associated with the full-range node corresponds to a logic low~~; and

~~a second shunt circuit that is coupled between a second bias node and the low-range signal,~~ wherein the second shunt circuit is configured to receive an n-type cascode bias signal at the second bias node.

18. (Original) The input level translator circuit of claim 17, wherein

the full-range signal has a range from a low-voltage level to a high-voltage level,

the low-range signal has a range from the low-voltage level to an intermediate-voltage level,

the high-range signal has a range from the intermediate-voltage level to the high-voltage level, and

the intermediate voltage level is partway between the low-voltage level and the high-voltage level.

19. (Original) The input level translator circuit of claim 17, wherein

the first shunt circuit is configured to:

short the high-range node to the first bias node if the full-range signal corresponds to a first logic level, and

isolate the high-range node from the first bias node if the full-range signal corresponds to a second logic level, and

the second shunt circuit is configured to:

short the low-range node to the second bias node if the full-range signal corresponds to the second logic level, and

isolate the low-range node from the second bias node if the full-range signal corresponds to the first logic level.

20. (Currently amended) An apparatus for translating a level for a full-range signal, comprising:

means for converting the full-range signal into a high-range signal at a high-range node;

means for converting the full-range signal into a low-range signal at a low-range node; and

means for ensuring that at least one of: the low-range node is driven during a full cycle of the full-range signal, or ~~and~~ the high-range node is driven during the full cycle of the full-range signal.